Less-Lethal Program

NIJ

National Institute of Justice

Office of Science and Technology

Research and Technology Development Division

NDIA - NLD VI

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Department of Justice

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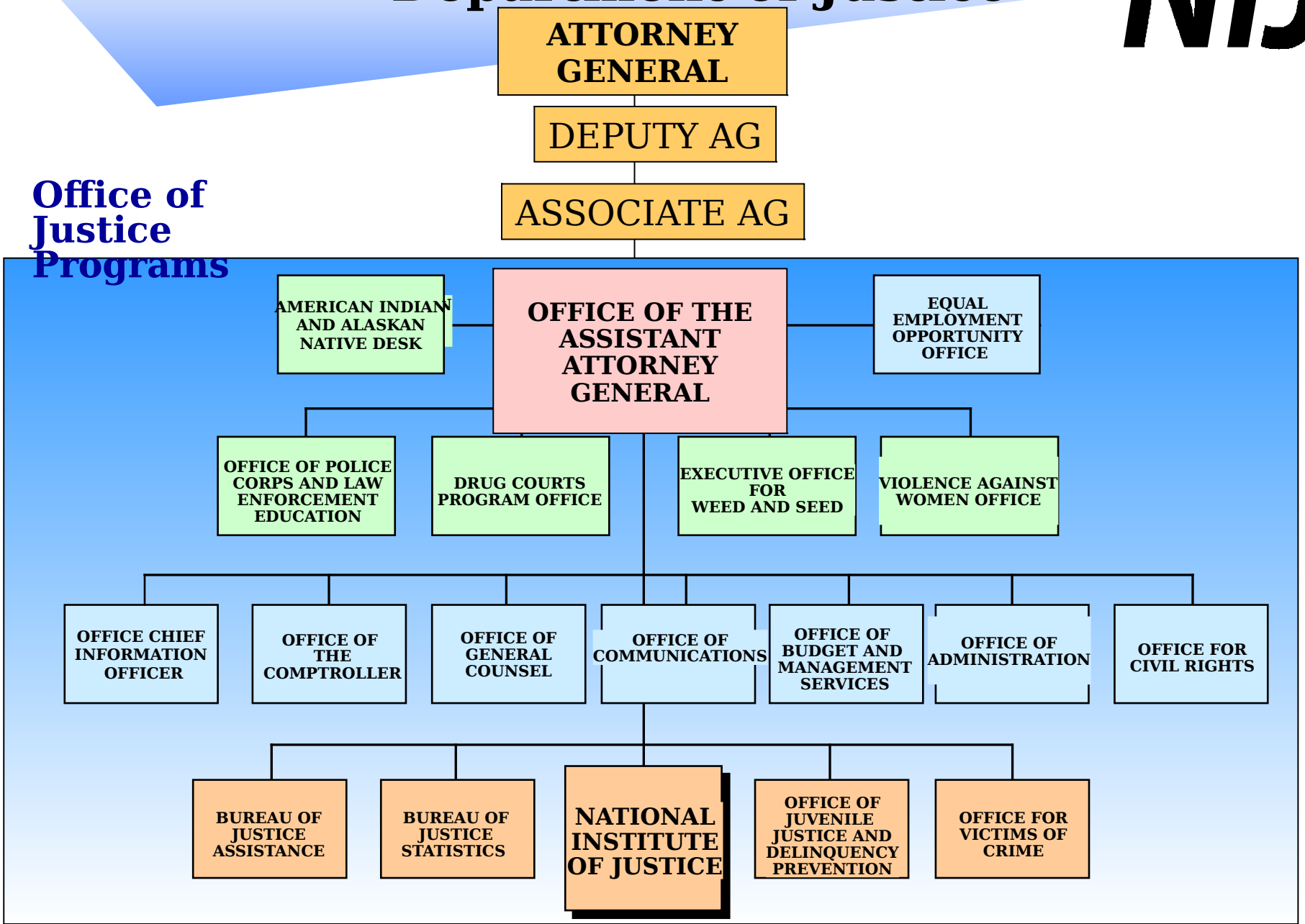
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NATIONAL INSTITUTE OF JUSTICE
OFFICE OF JUVENILE JUSTICE AND DELINQUENCY PREVENTION
OFFICE FOR VICTIMS OF CRIME

Mission of NIJ

NIJ

- The R&D arm of the Department of Justice
- Has no operational mission
- Two major areas of responsibility
  - Behavioral research

    Office of Research and Evaluation (ORE)
  - Physical science research

    Office of Science and Technology (OS&T)
    - Support Approximately 18,000 LE agencies
    - Support Approximately 3,000 Correctional agencies
    - Support Civilian Agencies w/o formal LL programs
    - Support first responders

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NIJ's Technology Centers

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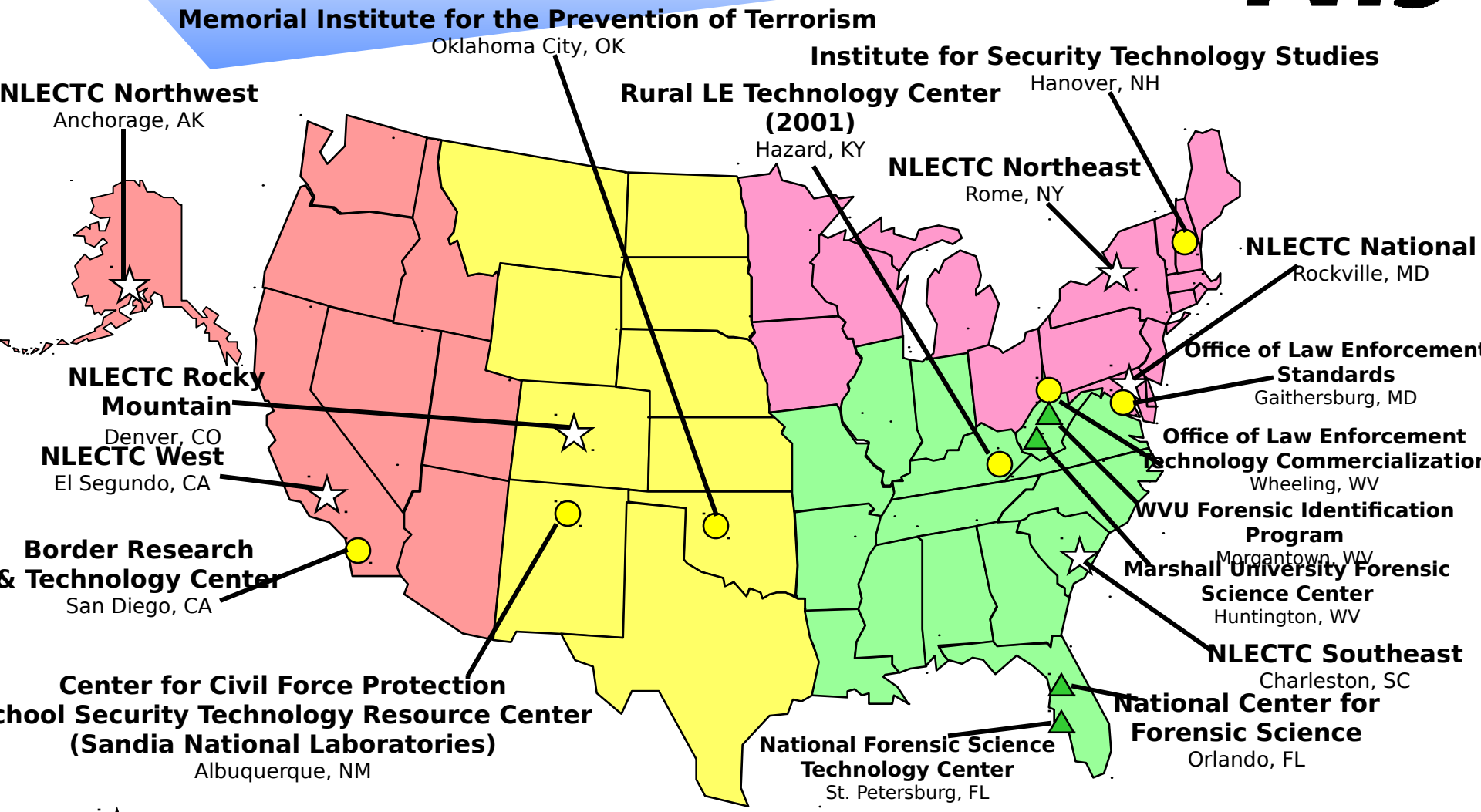

- National Law Enforcement & Corrections Technology Centers serving specific regions
- Specialty Offices and Centers
- Forensic Resource Network

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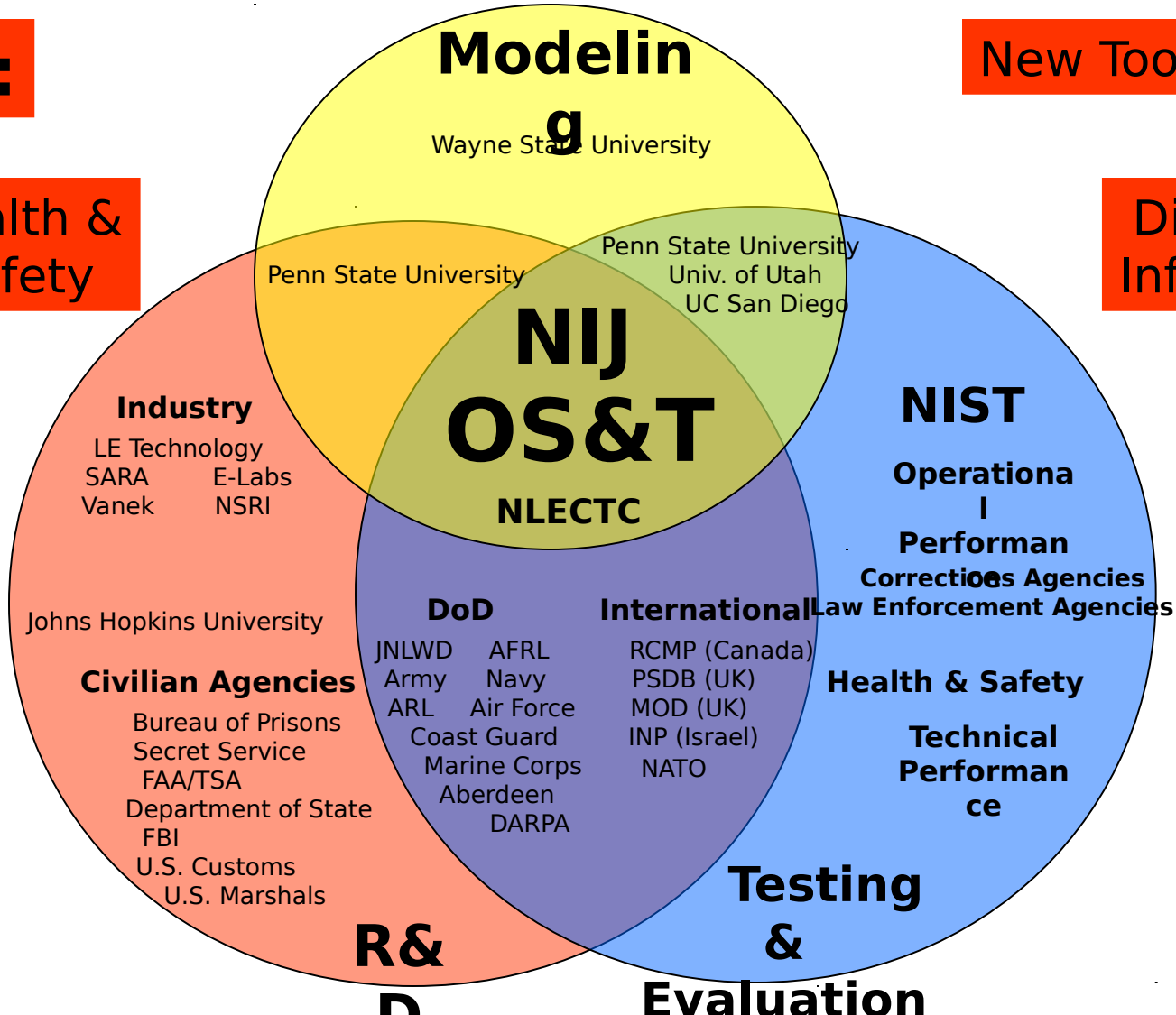
Goals:

New Tools

Health & Safety

Distribute Information



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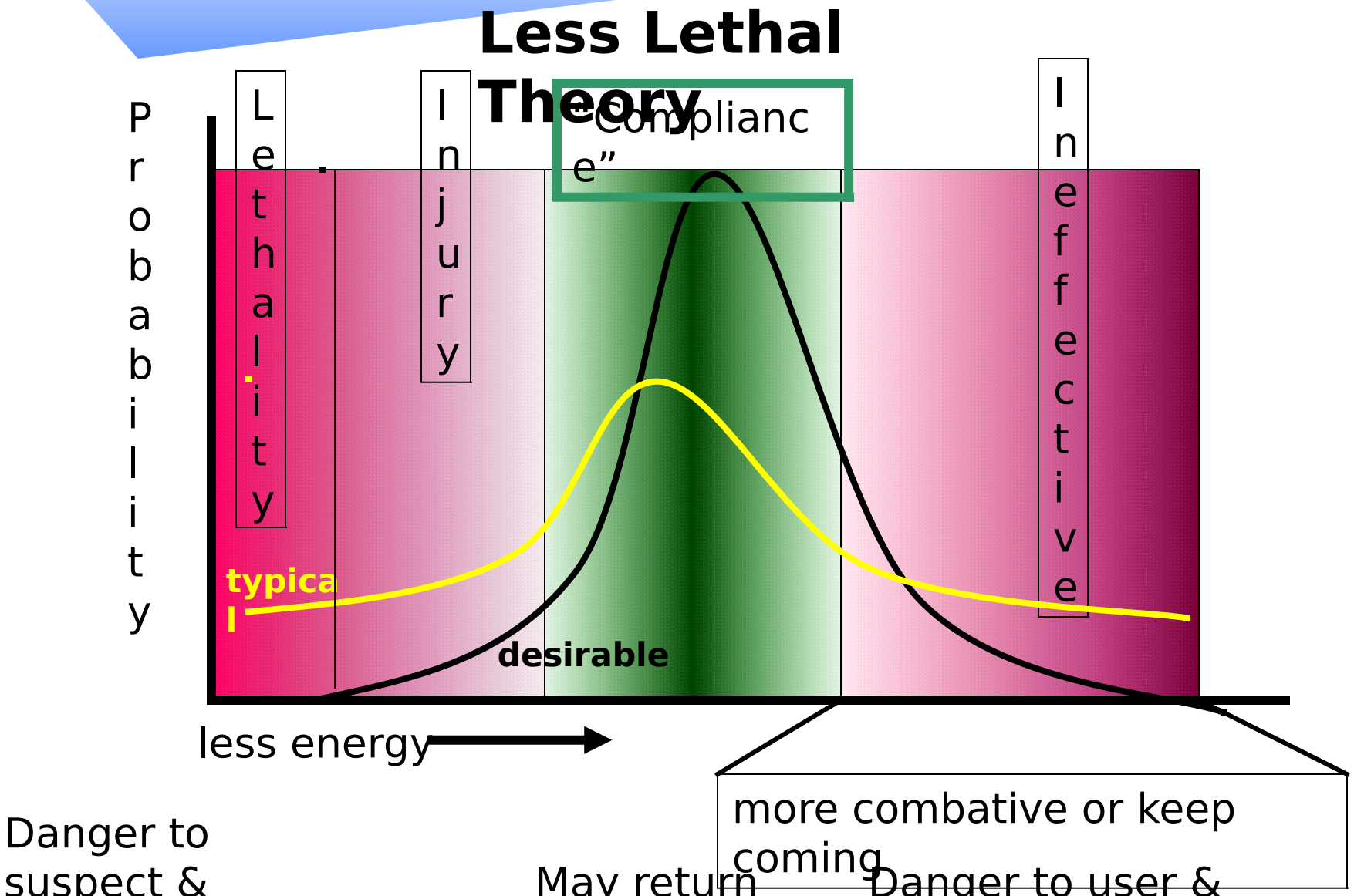

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THE "TWO" TYPES OF LL DEVICES

Primary Focus:

- Devices which "incapacitate"
  - Items you have no choice
  - Suspect is immobilized
  - "Involuntary" compliance

Secondary Focus:

- Devices which "provide an edge"
  - Items that distract, dissuade, deter, etc.
  - "Voluntary"/smart compliance

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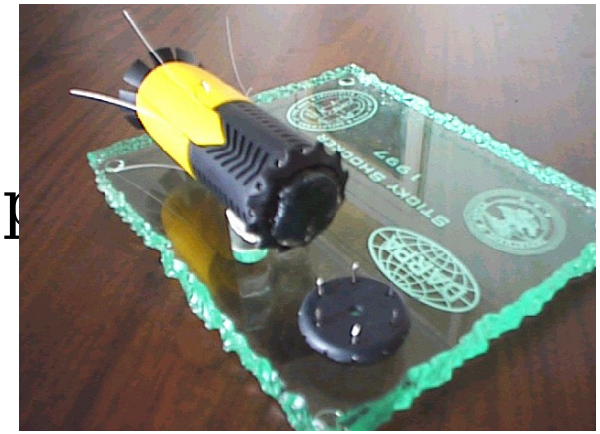
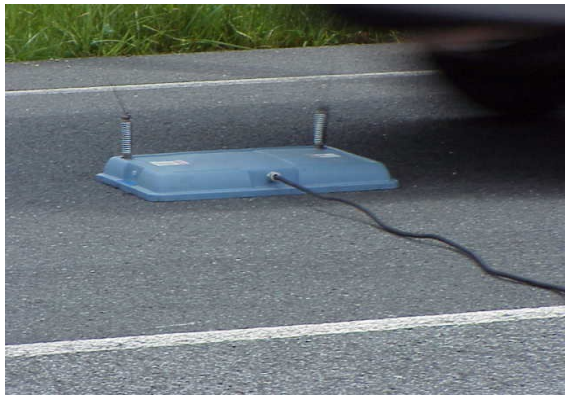
- **Less-Leth**

Incapacitat

- Blunt Trauma
- Electrical
- Chemical (Pepp
- Light/Laser
- Nets
- Acoustic
- Pursuit Management
- Modeling and Evaluation





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Less-Lethal for Homeland Security

LL in Aircraft

LL in Airports

State & Local folks protect your airports

Get new LL devices to airports for review: TAPAM, Xnet, PADS, MDS, etc.

LL in Quarantine scenarios

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Less-Lethal DOD vs. LEC Requests

Typical DOD		Typical LE
	Range	
100 to 5000 ft.		0 to 100 ft.
	Size/Weight	
Vehicle mount or smaller		Person portable
	Cost	
Tolerate higher costs		$750 or less
	Operations	
Combine Lethal with NL		Separate L & LL
Central purchasing		Each agency

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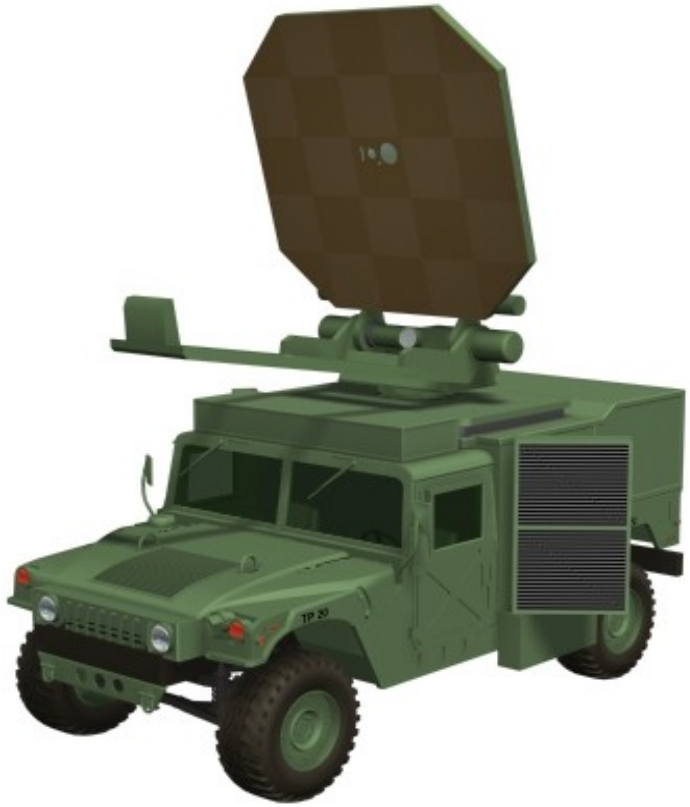

Less-Lethal - Directed Energy

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What about Directed Energy Devices ?

Consider the following prototype characteristics:

Min. Range 50 feet [w/ranging]

Energy Intense heat [<1 sec]

Effected Area 28 sq in [3” dia]

Number of shots 12 [magazine]

Size Shotgun

Intensity Adjustable

Safety Consideration Eye Safe

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“Force on Target”/ enabling technology - eye safety:

Measure range/position using the red eye effect:

Has the potential to aid in aiming & improving safety

- A place to avoid
- A reference from which to aim around
- A place to aim at
- Discriminate between animal or man
- The “Electronic Safety” on a weapon

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New Pilot Programs:

Directed Energy:

Mapping current flow through body [TASER]

RF based LL Device [weapon]

Optical based LL Device [weapon]

Electronic Flashbang [short duration laser/fiber amp]

Smart Dazzler and Associated concept

Miniaturized Sticky Shocker – funding cut

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New Pilot Programs:

Blunt Trauma:

RAP development

RAP Independent testing

LL Databases/Information:

LL database – mine existing, find new

Mine LASD database for TASER use

Prospective LL database - Wakeforest

ILEF conference & Prague

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New Requests/Solicitation 06:

Human Effects:

RF/Optical – short pulse application

Is reflex response via arch possible, Targeting simplified

Human susceptibility – new exploits for LL

Device Development:

Eye detector development

LL Databases/Information:

LL db – mine existing & collect at scene - NHTSA model – detailed analysis [lawyers, med, scientist, LEC, etc]

Can Training facilities be used to obtain LL data

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Find Us on the Web:

- National Institute of Justice (NIJ)
  Home Page: **<www.ojp.usdoj.gov/nij>**

- Justice Technology Information Network (JUSTNET)
  Home Page: **<www.nlectc.org>**

- Justice Information Center (National Criminal Justice Reference Service)
  Home Page: **<www.ncjrs.org>**

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Other LL sites on the Web:

- Pennsylvania State University
  Home Page [INLDT]: **<www.nldt.org>**

- Joint Non-Lethal Weapons Directorate (JNLWD)
  Home Page: **<www.jnlwd.usmc.mil>**

- University of New Hampshire
  Home Page [NTIC]: **<www.unh.edu/ntic>**

QUESTIONS ?
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